

5. Description of a little-known Australian Fish of the Genus *Girella*. By J. DOUGLAS-OGILBY, Ichthyol. Dept. Australian Museum. (Communicated by F. DAY, Esq., F.Z.S.)

[Received March 26, 1887.]

GIRELLA CYANEA,, Macleay, Descr. Cat. Austr. Fishes, i. p. 109.

B. vi. D. 14-15/13. A. 3/11. V. 1/5. P. 19-20. C. 17.
L. lat. 55-56. L. tr. 11-12/26. Cæc. pyl. num. Vert. 11/16.

Length of head $5-5\frac{1}{3}$, of caudal fin $4-4\frac{1}{2}$, height of body $2\frac{3}{4}-3\frac{1}{4}$ in the total length. *Eye*— $4-4\frac{1}{2}$ diameters in the length of the head, $1\frac{1}{2}-1\frac{2}{3}$ in that of the snout, and $1\frac{1}{2}-1\frac{3}{4}$ apart. Interorbital space convex; upper profile of head rounded. Upper jaw the longer; cleft of mouth small and transverse. The maxilla reaches to beneath the posterior nostril. The height of the preorbital is less than its breadth. Opercle with a small flat spine. Vertical limb of preopercle inclining slightly backwards from the angle, very slightly denticulated in the smaller, smooth in the larger example. *Teeth*—A single row of strong tricuspid teeth in the jaws; behind these, at some distance, a broad band of less developed but similar teeth. *Fins*—Dorsal spines of moderate strength, increasing in length to about the seventh, whence there is little or no difference to the last, which is $\frac{2}{5}$ of the length of the head; the rays are about equal to the spines in height, but the length of their base is little more than half that of the spinous dorsal; the dorsal fin commences above the 7th and ends above the 43rd scale of the lateral line; the anal commences beneath the origin of the soft dorsal, whose rays are not nearly so long as those of the anal, the third spine is much stronger and but little shorter than the highest dorsal spines; the lower margin of the anal rays is obliquely truncate; the ventral fin does not extend to the vent; the pectoral fins are rather less than the length of the head; caudal fin deeply emarginate, with acute lobes. *Scales*—moderate, finely ctenoid, firmly adherent, those on the cheeks small and deeply imbedded; streaks of small scales between each pair of the dorsal and anal spines and rays. Interorbital space, snout, orbital ring, mandibular region, and opercular bones (with the exception of a few on the upper edge of the opercle) scaleless. *Lateral line*—with a long slight curve to beneath the end of the dorsal fin; its tubes simple. *Pseudobranchiæ*—well developed. *Gill-rakers*—short and stout, numbering 28 on the outer branchial arch. The abdominal portion of the vertebral column is two thirds of the length of the caudal portion. *Colours*—Upper parts dark blue, gradually fading to greyish white on the abdominal region; some scattered yellow spots, about three fourths of a scale in size, on the upper half of the body; these probably disappear with age, since in the larger example they are few in number and faint. Fins blue. Irides brown and yellow.

This handsome *Girella* is known to the fishermen along the coast

under the name of "Blue-fish," in contradistinction to its congener *G. tricuspidata*, which is the "Black-fish" of New South Wales¹. It is considered rare by them, and must evidently be so, but two specimens having been brought to the Sydney market within the last eighteen months; both of these fortunately came into my hands, and from them when in a fresh state I have drawn up the above description. The larger specimen measured $23\frac{1}{2}$, the smaller 17 inches.

Putting aside the difference of coloration, *G. cyanea* may be at once distinguished from the common *G. tricuspidata* by the greater number of pectoral rays, the greater length of that fin, the number of scales on the lateral and transverse lines, and the much longer and differently shaped tail-fin; and the necessity for pointing these differences out is the greater that within a few hours of its capture it entirely loses its beautiful tints, even the conspicuous yellow spots, leaving not a trace behind, and becomes to the ordinary observer a "Black-fish." Without the aid of these variations the two described, though not yet a month mounted, would be indistinguishable from their congener.

Habits. These fishes appear to be partial to rocky coasts or islands surrounded by deep water, both my specimens having been obtained in such places by hook; and, so far as I have been able to ascertain, it is never taken in estuaries and lagoons, which are favourite haunts of *G. tricuspidata*.

Food. In respect to this they appear to be of an accommodating disposition, though seaweed, especially the calcareous kinds, undoubtedly form the great bulk of it, along with hydroid zoophytes; but in the larger specimen there was also a good-sized squid² and the remains of a fish some six inches long.

Breeding. The smaller example showed no signs whatever of breeding, but the larger was a female with the ova well developed; both were caught in December.

As food. I had a piece of the larger one boiled, but found it coarse and without flavour; smaller individuals would, however, be probably found equally palatable as the "Black-fish," which, however, is not giving it much praise.

Habitat. Botany Heads and Broken Bay. Both Dr. Ramsay and Mr. W. Macleay are inclined to think that a "Blue-fish" said to be very common at Lord Howe Island is this species, but we have no example from that locality.

Finally, I shall take this opportunity of setting right any mistake which might occur through the bad wording of a note in my 'Catalogue of New South Wales Fishes,' 1886, p. 18; in the note on *G. zonata*

¹ The same trivial name being applied to different fishes in the different colonies is liable to cause confusion; for instance the "Yellow-tail" of Sydney is *Caranx trachurus*, while that of Melbourne is *Seriola lalandei*, which goes by the name of "King-fish" here, whereas the Melbourne "King-fish" is a *Sciæna*.

² To Mr. Whitelegge I am indebted for the information that the greater part of the hydroid zoophytes belong either to *Sertularia elongata* or *Aglaophenia divaricata*; and to Mr. Brazier that the "squid" mentioned was *Sepiateuthis australis*.

the wording makes it appear as if I considered that name to be a mere synonym of *G. tricuspidata*. I had no such intention; what I meant to convey was, that Count Castelnau had mistaken the ordinary banded form of *G. tricuspidata* for *G. zonata*, which is certainly not known in this colony. Regarding this banding, which I had considered to be indicative of youth, as in the case of many other fishes, I am now at a loss, as I have seen many banded examples of equal size with the plain ones; and I am informed that the same haul of a net will frequently take equal numbers of either form, and even the fishermen, who as a rule go by colours, recognize only one species.

Since writing the above I have had an opportunity of seeing a living specimen of this beautiful fish in the Manly Aquarium; it is smaller than either of my specimens, being, I should say, about 14 inches long; is of a brighter blue all over, and has more golden spots.

6. On an undescribed Fish of the Genus *Prionurus* from Australia. By J. DOUGLAS-OGILBY, Ichthyol. Dept. Australian Museum. (Communicated by F. DAY, Esq., F.Z.S.)

[Received March 26, 1887.]

The fish which is described below belongs to a small collection obtained some years ago in Port Jackson, and measures over 15 inches. It is very distinct from our common *P. microlepidotus*, and though it agrees with *P. scalprum* in the fin-rays and profile of snout, in other points it approaches nearer to *P. laticlavius*; I have no choice therefore but to describe it as a new species.

PRIONURUS MACULATUS, sp. nov.

B. v. D. 9/24. A. 3/23. V. 1/5. P. 17. C. 17.

Length of head $4\frac{2}{5}$, of caudal fin $5\frac{1}{3}$, height of body $2\frac{2}{3}$ in the total length. *Eye*—diameter $\frac{1}{4}$ of the length of the head, $\frac{2}{5}$ of that of the snout, and $\frac{5}{6}$ of the interorbital space, which is convex. The upper profile of the snout is very slightly concave, that of the occiput as slightly convex. Upper jaw overhanging the lower. *Teeth*—A single series of compressed pluricuspid teeth in both jaws. *Fins*.—The dorsal fin commences above the opercular angle; its spines are moderately strong, the fifth the highest, $\frac{2}{3}$ of the length of the head, the first very short; the rays are nowhere so high as the spines; the base of the spinous portion is $\frac{5}{7}$ of that of the soft. The anal fin commences beneath the last dorsal spine; its third spine is much the longest, equal to the anterior rays and almost as long as the fifth dorsal spine. The ventral fins reach to the second anal spine. Pectorals truncate behind, reaching to a little beyond the ventrals and equal in length to the head. Caudal fin emarginate. *Caudal laminae*—a series of three keeled bony plates